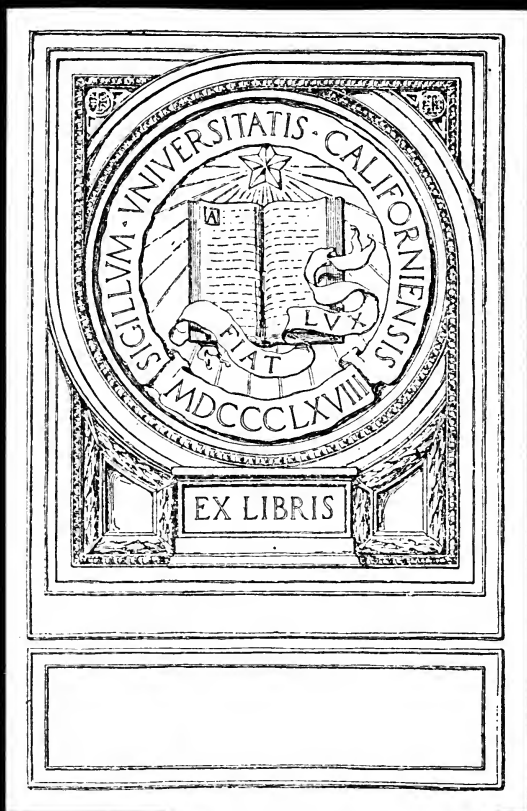


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# Health Essentials for Rural School Children



Proposed by

The Joint Committee on Health  
Problems in Education of the  
National Council of Education  
National Education Association

and the

Council on Health  
American Medical Association

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Second Edition, 1921

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The Joint Committee on Health Problems in Education  
of the  
National Education Association  
and the  
American Medical Association

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## Introduction

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The first pamphlet report of this joint Committee is entitled "Minimum Health Requirements for Rural Schools." Seven hundred and fifty thousand copies of that eight page report have been printed, through the generosity of the Elizabeth McCormick Memorial Fund of Chicago, and most of these have been distributed throughout the country by the United States Bureau of Education. A second edition of that report has been printed and copies may be obtained at cost of printing from the Chairman of the Committee.

The first report deals mostly with the health problems of the rural school—the sanitary surroundings of the school child in the country. Minimum sanitary requirements for rural schools are proposed in that report for the purpose of helping to establish a standard of fundamental health essentials in the rural school and its material equipment, so that attainment of this minimum standard may be demanded by public opinion and by educational authorities of every school in the country.

Conformity to the minimum sanitary requirements should be absolutely necessary to the pride and self respect of the community; and to the sanction and approval of county, state, and other supervising and interested official or social agencies.

Neglect of anything essential for health, in construction, equipment and care of the rural school plant is at least an educational sin of omission and may reasonably be considered a social and civic crime or misdemeanor.

The country schoolhouse should be as sanitary and wholesome in all essential conditions as the best home in the community. Further, it should be pleasing and attractive in appearance, in furnishings and in surroundings, so that the community as a whole may be proud of it; so that the pupils and teacher may take pleasure in attending school and in caring for and improving it.

## PLAN OF THIS REPORT

The purposes of this second pamphlet are:

(a) To state the health conditions of rural school-children at the present time.

(b) To propose and recommend the practical measures considered necessary and practicable for the health care of children in country schools.

(c) To report praiseworthy efforts which are now being made in a few instances to provide for health care of rural school children, and which may result in giving to rural school children at least as much health care as is provided for children in the cities.

The third report of the Committee is entitled "Health Charts" and shows miniature reproductions of the fifty-eight health charts of the Joint Health Committee. This Health Chart Pamphlet is being used extensively in health teaching to supplement the use of the full-sized health charts.

The Health Charts are being used in all parts of the United States and in some foreign countries in programs and exhibits of Schools, Boards of Health, Red Cross work, Anti-Tuberculosis and other Health Organizations, also in State and County Fairs.

Information regarding the Health Charts and the Health Chart Pamphlet may be obtained by addressing the Chairman of the Committee.

The fourth report of the Joint Committee is entitled—"Health Improvement in Rural Schools." This report, to be ready for distribution very soon, gives much interesting and helpful information regarding the most progressive and best types of health work which is being done in and for the rural schools in various parts of the United States.

The fifth report of the Joint Committee entitled—"The Teacher's Part in Social Hygiene" is now being distributed.

# Essentials for Health of Rural School Children

## PRESENT CONDITIONS

More than half (about 12,000,000, or three-fifths) of the school children in the United States are attending rural schools. Country children attending rural schools are, on the average, less healthy and are handicapped by more physical defects than the children of the cities, including all the children of the slums. And this is true, in general, of all parts of the United States.

Table I (page 4) is made up from the official statistics of school children gathered from many parts of the country. These statistics lack uniformity; they contain, doubtless, many errors; but there are probably as many errors in the statistics of the city school children as in those of children in the rural schools.

Health examinations of over one million school children in New York State directed by the State Department of Education in the last four years show that 72 per cent. of pupils in city schools and 87 per cent. of pupils in rural schools have health defects.

The conclusion that the health of the people in the country is not so good as the health of those living in cities finds further proof by comparison of the death rate of rural New York and of New York City. Table II (page 5) illustrates this important fact.

For the last ten years the death rate in rural New York has been higher than the death rate in New York City, the largest city in the world. It is apparent that within the last ten or twenty years the standards of life in cities, in relation to health at least, have risen above those of rural communities.

It is just as true, however, and of the greatest significance, that most of our best human material for leadership in city and country must still come from the farms. For the most part, the raw material to supply the needs of civilization, including the best human supply, must continue to come from the soil. This is in accordance with a great, universal law of life.

If rural America is to continue to be a satisfactory

nursery of human life for the nation, it must be made healthful and attractive; it must provide conditions favorable for the cultivation of the best.

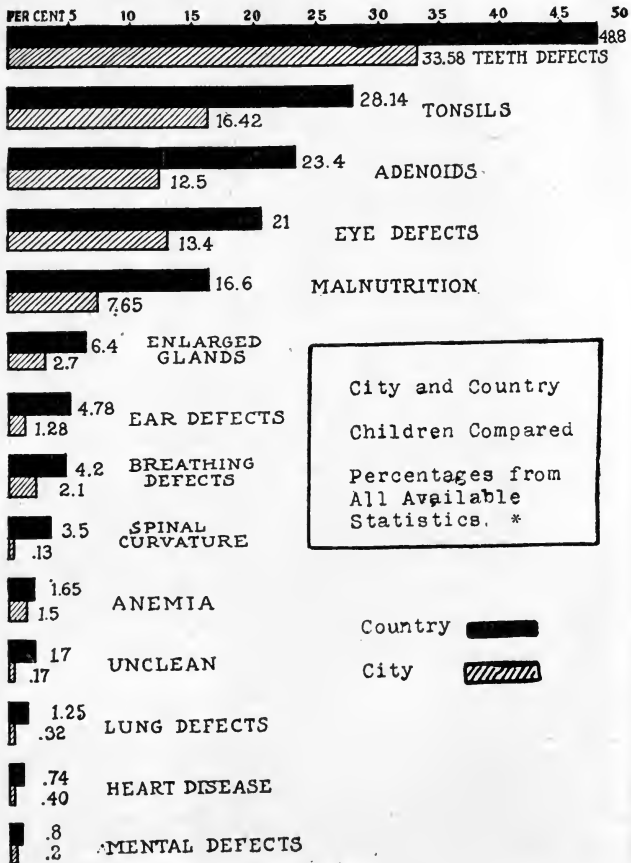


TABLE I  
Health defects of school children.

The improvement of human health and welfare in rural America is a problem of the greatest significance in relation to our national welfare. It is a problem affecting national safety, national prosperity, national perpetuity. It is a problem dealing with the most essential and most endangered of all of our national resources.

\* This table is based on the reports of over a half million children.



No factor is of greater fundamental importance for securing national preparedness either for peace or for possible war.

The most vital phase of this problem of rural health relates to the health and welfare of the children.

Country children deserve at least as much health and happiness as city children.

Country children are entitled to as careful cultivation as crops and live stock.

It is recognized more clearly every day that the public school is the strategic agency to provide for the children of each community not only the best possible methods of general education but also the best available standards for care of health.

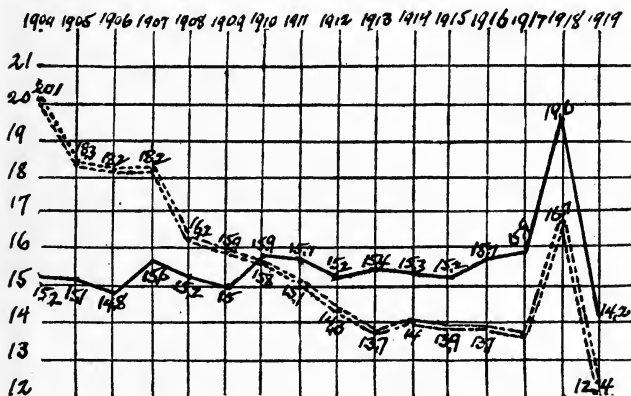


TABLE II.

Comparative death rates, urban and rural.

===== New York City.

----- New York State, outside of New York City.

In our cities, parents of all grades of prosperity appreciate increasingly the advice and guidance of the schools regarding better care of the children's health. It is evident that the same methods will not apply in country and city, but the fundamental needs of children in country and city are much the same. With reference to the common problems of life and education the schools of city and country may learn many important lessons from one another. Provisions in schools for health supervision and care of children are still comparatively new in both city and country. About

four hundred cities in the United States now have health work of the schools developed to some degree of usefulness and efficiency. The health work in rural schools is still very new, but enough has been done in a few states and in comparatively few rural schools to demonstrate how important and how practical are these forms of health work.

#### THE CONTROL OF COMMUNICABLE DISEASE— DAILY HEALTH INSPECTION

Thoughtful care and sympathetic cooperation of home and school are needed to keep the school from distributing communicable diseases throughout the community. If there is fairly intelligent cooperation of parents, teachers and health officers in school and community, there need be no epidemics in schools. Conscience as well as intelligence on the part of all concerned is requisite for the suppression of contagious diseases.

No child should ever knowingly be exposed to contagious disease. The older the child is before being exposed to contagious disease the less apt he is to catch it. The older a child is before having a contagious disease of childhood, the less severe, on the average, is it likely to be. The early detection of signs of children's diseases and the early exclusion from school of children showing such signs, are the best means of minimizing the communication of disease in schools and of removing the possibility that the school may act as a disease center.

#### INDICATIONS OF HEALTH DISORDERS IN CHILDREN FOR WHICH PARENTS SHOULD KEEP CHILDREN AT HOME AND NOTIFY THE SCHOOL

Nausea or vomiting.  
Chill, convulsions (fits).  
Dizziness, faintness or unusual pallor (alarming paleness of the face).  
Eruption (rash) of any kind.  
Fever.  
Running nose.  
Red or running eyes.  
Sore or inflamed throat.  
Acutely swollen glands.  
New cough.

Any distinct or disturbing change from usual appearance or conduct of child.

The foregoing signs should be used also by teachers as a basis for excluding pupils from school for the day, or until signs have disappeared, or until the proper health officer has authorized the return of the pupil to school. Children may be taught — without developing disturbing fears, or attempts to deceive — to notice the above-mentioned signs in themselves or in their companions, and thus may help to protect the school from contagious disease.

The detection of these first signs of health disturbance at home, by the parent or the child, before starting for school, is of especial importance in the country where the longer trip to school with greater physical exertion, sometimes in bad weather, would be particularly injurious to a child at the beginning of an illness.

In cases of contagious disease among schoolchildren, the length of time of exclusion from school must be determined by the medical or school authorities.

#### HEALTH EXAMINATIONS TO DETERMINE GENERAL PHYSICAL FITNESS OF THE CHILD AND TO DISCOVER PHYSICAL DEFECTS

Every school child should have a health examination once a year. More frequent examinations should be provided for individual pupils who need special attention. All health examinations and attention in rural and in city schools should be under the supervision of regularly appointed school physicians thoroughly trained for their work. Every state should have a state health inspector of schools who should give special attention to the health work of the rural schools. The routine tests of vision and hearing can best be made by the teachers, as these tests involve to an unusual extent mental and educational as well as health factors, and require the knowledge of pupils, possessed by the teacher, as well as simple methods of examination which all capable teachers can easily learn. The general health examinations in the rural schools can often be done most advantageously by the school nurse with the help of the teacher.

There should be for every child a health as well as a scholarship record which accompanies him through his public school career. This should be a part of the

record of the school which the child is attending. The following form or blank has been tested sufficiently in rural as well as city schools to prove its practical value.

### HEALTH RECORD

Name..... Born in..... on (date).....  
 Nationality of Father.... Mother.... No. in family, Adults.. Children..  
 Number of birth... History of Measles... Scarlet fever... Diphtheria..  
 Whooping cough..... Pneumonia..... Grippe.....  
 Date of first examination..... in school.....

	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	7 yr.	8 yr.
1. Age and year.....								
2. Grade .....								
3. Class .....								
4. Revaccinations .....								
5. Diseases during year.....								
6. Date of examinations...								
7. Height .....								
8. Weight .....								
9. Nutrition .....								
10. Anemia .....								
11. Enlarged glands .....								
12. Nervous diseases .....								
13. Cardiac diseases .....								
14. Pulmonary diseases .....								
15. Skin diseases .....								
16. Orthopedic defect .....								
17. Defect of vision.....								
18. Defect of hearing.....								
19. Defect of nasal breathing .....								
20. Defect of palate.....								
21. Defect of teeth.....								
22. Hernia .....								
23. Hypertrophied tonsils...								
24. Adenoids .....								
25. Mentality .....								
26. Conduct .....								
27. Effort .....								
28. Proficiency .....								
29. Treatment necessary....								

### FINDING AND REPORTING PHYSICAL DEFECTS—

#### DIRECTIONS TO TEACHERS—TEST

#### OF EYESIGHT

The eyes of children who wear glasses should be tested with the glasses, and if found normal should be so recorded.

Hang the Snellen<sup>1</sup> test letters in a good clear light (side light preferred) on a level with the head, and so placed that the child does not face a strong light. Place the child 20 feet from the letters. Cover one eye with a card held firmly against the nose, without pressing on the covered eye, and have him read aloud, from left to right, the smallest letters he can see on the card. Make a record of the result.

1. Snellen test charts may be obtained from the State Education Department, or from educational supply houses.

Children who have not learned their letters, obviously, cannot be given this eyesight test until after they have learned them. Pupils who cannot read may, however, be tested with the incomplete ring or square test in which the child is required to indicate from the greatest distance possible the direction in which the "break" in the square or ring is turned.

#### TO RECORD THE ACUTENESS OF VISION

There is a number over each line of the test letters which shows the distance in feet at which these letters should be read by a normal eye. From top to bottom, the lines on the card are numbered respectively 50, 40, 30 and 20. At a distance of 20 feet, the average normal eye should read the letters on the 20-foot line, and if this is done correctly, or with a mistake of one or two letters, the vision may be noted as  $\frac{20}{20}$  or normal. In this fraction the numerator is the distance in feet at which the letters are read, and the denominator is the number over the smallest line of letters read. If the smallest letters which can be read are on the 30-foot line, the vision will be noted as  $\frac{20}{30}$ ; if the letters on the 40-foot line are the smallest that can be read, the record will be  $\frac{20}{40}$ . If the letters on the 50-foot line are the smallest that can be read, the record will be  $\frac{20}{50}$ .

If the child cannot see the largest letters (those on the 50-foot line), have him approach slowly until the distance is found from which they can be seen. If 5 is the nearest distance from which the 50-foot letters can be read, the record will be  $\frac{5}{50}$  ( $\frac{1}{10}$  of normal).

Test the second eye, the first being covered with the card, and note the result as before. With the second eye, have the child read the letters from right to left, to avoid memorizing. To prevent reading from memory, a hole  $1\frac{1}{2}$  inches square may be cut in a piece of cardboard, which may be held against the test letters so as to show only one letter at a time, and which may be moved about so as to show the letters in irregular order. The card must be kept where it cannot be seen and memorized. A mistake of two letters on the 20 or 30-foot line and of one letter on the 40 or 50-foot line may be allowed.

Parents should be notified if :

- (a) Vision in either eye is  $\frac{20}{40}$  or less.
- (b) Child habitually holds head too near book (less than 12 inches).
- (c) Child frequently complains of headache, especially in the latter portion of school hours.
- (d) Either eye deviates even temporarily from normal position.

#### TEST OF HEARING

If it is possible, one person should make the examination for an entire school in order to insure an even method. The person selected should be one possessed of normal hearing.

The examination should be made with the whispered voice; the child should repeat what he hears, and the distance at which words can be heard distinctly should be noted.

The two ears should be tested separately.

The test should consist of numbers, 1 to 100, and short sentences. To avoid imitation, it is best that but one pupil at a time be allowed in the room.

For very young children a fair idea of the hearing may be obtained by picking out the backward or inattentive pupils and those that seem to watch the teacher's lips, placing them with their backs to the examiner and asking them to perform some unusual movement of the hand or other acts.

#### REPORTING DEFECTS

Physical defects should be reported to the homes, and all possible efforts should be made by teachers, superintendents, school nurses and school doctors to persuade the parents to obtain for the child the care necessary for correction of all defects that it is possible to remedy.

Our schools are spending millions in educating, or trying to educate, the children who are kept back by ill health, when the expenditure of thousands in a judicious health program would produce an extraordinary saving in economy and efficiency. A dollar spent in a wise, constructive effort to conserve a child's health and general welfare will be more fruitful for the child

and for the general good than a thousand times that sum delayed for twenty years. The principle of thrift in education finds its first and most vital application in the conservation and improvement of the health of the children.

### PHYSICAL DEFECTS

Possible injurious effects of the more important physical defects of children may be classified as follows:

#### I. Malnutrition.

This is a serious health defect in children.

Most of the children who are 10 per cent. or more underweight for height and age are handicapped from *malnutrition*. Twenty per cent. at least of all school children are malnourished.

Malnutrition produces:

1. Lack of vitality and ambition.
  2. Interference with growth and development of the mind and body.
  3. Lessened resistance to many kinds of disease.
- Malnutrition may be prevented or cured by:

1. Correction of defects, such as nasal obstructions, adenoids, diseased tonsils, and defective teeth.
2. Sufficient amount of proper food, chewed thoroughly; eaten regularly, and never hurriedly. Some fruit or well-cooked vegetables every day. No tea or coffee for growing children.
3. Warm mid-day lunches for all school children and one or two extra lunches daily until weight is up to standard.
4. Plenty of sleep and rest, always with windows open in bed room. For a child with malnutrition—early to bed; one-half hour's rest in bed during the day, and all the out-door air possible at all times.
5. Outdoor exercise and play every day.
6. Avoidance of over-excitement, worry, or other emotional disturbance, especially at meal-time or just before bedtime,

There should be scales in every school. Each pupil should be weighed once a month at least. The interest

of pupils should be enlisted in weighing themselves under the supervision of the teacher, school nurse or the supervisor of physical education. Weights should be systematically recorded on cards or wall charts provided for that purpose. Pupils who are suffering from malnutrition may beneficially be grouped in a "nutrition class" and special efforts made to bring weight up to normal standard as promptly as possible.

## II. Defective eyes with imperfect vision.

- (a) Headache, commonly through forehead or back of head or both.
- (b) Blurring of sight; but in farsightedness with eye strain, vision may be exceptionally good, especially for distant objects.
- (c) Nausea and dizziness; sometimes disturbance of digestion, with resulting malnutrition.
- (d) Nervous exhaustion.
- (e) Nervous irritation and lack of nervous control, shown in muscular twitching of face, arms and legs, or in winking frequently and squeezing the eye-lids shut.
- (f) Mental inability to grasp an idea presented through the eyes.
- (g) Retardation in school.
- (h) In rare cases, convulsions.

Some medical authorities have attributed epileptic and epileptiform seizures to abnormal eyes.

## III. Defective ears.

- (a) Catarrh of middle ear — danger of mastoid disease.
- (b) Deficient hearing — pupil often dull, careless, listless, inattentive, and mentally backward.
- (c) Retardation in school.
- (d) Pupils are often considered mentally defective when the only primary defect is imperfect hearing.

## IV. Adenoids.

- (a) Structural effects:
  1. High-arched palate.



2. Narrowing of upper jaw.
3. Deformity of chest, resulting from obstructed and imperfect breathing, shown by lateral depression of front of chest and prominent sternum (breast bone).
4. Disturbed development of teeth and vocal organs.
5. Large tonsils in one third of cases.

(b) Functional disturbances:

1. Mental.

- a. Disturbance in function of brain resulting in *aprosechia nasalis*, that is, difficulty in forming an idea of anything new; stupidity; difficulty in retaining ideas; weakness of memory; inability to turn thought on a definite subject; lack of power of attention.

- b. Irritability, depression and often disorderly conduct.

2. Deafness.

3. Defects in sense of smell and taste.

4. Defects in voice (nasal voice).

5. Chronic rhino-pharyngeal catarrh, shown by a persistent nasal discharge. This is often one of the first symptoms. In very young children it is manifested by snuffles.

6. Obstruction of air passages resulting in breathing disturbances, manifested by open mouth and great restlessness at night, the child being forced to assume various attitudes, such as sleeping on face, in order to breathe better.

7. Reflex.

- a. Catarrhal spasm of larynx, or croup.
- b. Headache.
- c. Intractable cough and hoarseness.
- d. Bronchial asthma.
- e. Enuresis (incontinence of urine).

## (c) General effects:

1. Malnutrition and anemia.
2. Underdevelopment, physical and mental.
3. Predisposition to otitis media (middle-ear disease), laryngitis, colds of a remittent nature; increased susceptibility to disease infections, such as tuberculosis, diphtheria, scarlet fever, etc.

- (d) Description of appearance of a child with marked adenoid enlargement — mouth open; dull, sleepy, with inquiring look; upper lip short and thick; upper jaw narrow; nasal orifices small and pinched, the face full under the eyes; listless and indisposed to physical or mental exertion; stupid and backward; in school, from one to two years behind the normal pupil of same age; undersized.

## V. Enlarged and diseased tonsils.

Enlarged and diseased tonsils produce many of the unfavorable results attributed to adenoids. The two conditions are often associated and it is difficult to distinguish between their effects. Enlarged and diseased tonsils increase susceptibility to

- (a) Tonsillitis.
- (b) Quinsy.
- (c) Diphtheria.
- (d) Rheumatism.
- (e) Tuberculosis.
- (f) Pneumonia, and other forms of infection.

The presence of enlarged and diseased tonsils, and adenoids in school children should be known and when any disturbances of health can be attributed to them by a competent physician, these structures should be removed. Their absence in such a case is an unqualified advantage.

## VI. Defective teeth.

"If I were asked to say whether more physical deterioration was produced by alcohol or by defective teeth, I should unhesitatingly say, defective teeth. In some schools as many as 98 per cent. of pupils have

defective teeth. From 50 to 75 per cent. of all school-children in this country need at this moment dental care." <sup>2</sup>

(a) Direct effects:

1. Pain of excruciating type resulting in great loss of time and rest.
2. Foul breath with unsightly and inflamed mouth.
3. Improper mastication of food.
4. Extension of decay in sound teeth.
5. Decay of temporary teeth resulting in unsound and carious permanent teeth.
6. Infection of glands.
7. Infection of maxillary (jaw) bone.
8. Earache with otitis-media (middle-ear disease) and deafness.
9. Headache.
11. Disturbance in function of eye.
12. Frequent digestive disturbance.

(b) Indirect effects:

1. Condition of poor nutrition and lessened resistance to disease.
2. Formation by carious teeth of an almost perfect culture bed for growth of pathogenic bacteria. This condition with lowered resistance leads to increased frequency of infection with pneumonia, diphtheria, rheumatism, heart disease, etc.
3. General infections dangerous to life in some cases.
4. Results which accompany defective hearing.
5. Lowering of vitality and temporary or permanent ill health.

VII. The condition of the skin is an important indication of the general tone and health condition of the body. Persistent eruptions should be noted and treated.

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2. Osler: *Lancet*, London, Oct. 21, 1902.

- VIII. Abnormal condition of the heart, even if temporary, may disturb health, and if neglected may result in permanent weakness of the heart itself or of the body in general. The condition of the heart is always an important index of the health condition, and is often a valuable guide in adjusting the amount of sleep, arrangement of school program, and selection of muscular exercise which is most suitable for the pupil.
- IX. The lungs are important as a frequent location of tuberculosis. Lung tuberculosis is more frequent among schoolchildren than has commonly been supposed. In pupils who are underweight, anemic, lacking in vitality, even if not coughing, the lungs should be carefully watched.
- X. Deviation of spine, roundness of shoulders and stooping postures are common among boys and girls, especially between the ages of 11 and 16. Many children outgrow these conditions without special attention, but these asymmetries should be inspected from time to time to prevent, as far as possible, the more chronic defects in posture, and the occasional cases of genuine scoliosis (curvature of the spine) which begin so insidiously. Defects of the arches of the feet may interfere seriously with activity and healthy development. They should receive careful attention.
- XI. Abdominal hernia (rupture) involves serious and often dangerous weakness of the abdominal walls. It is important for the welfare of children, in the occasional cases which exist, that the condition should be detected and given appropriate treatment.

#### CORRECTION OF DEFECTS

The problem of securing satisfactory means for the removal of physical defects in rural school children is especially difficult, as hospitals, clinics, nurses, dentists and surgeons are usually so far distant.

The county unit of organization for health, as well as other rural interests, has already proved successful and promises the best results.

Every county should have one full-time health officer; one or more school or district nurses, and at least one community health center, to provide satis-

factory, self-supporting health (including dental, medical, and surgical) service for all the people, including the school children. The fullest possible use should be made of all available means and agencies for providing the health attention needed by the children. In several cities, clinics for examining eyes and fitting glasses, and dental clinics have been installed and operated successfully in school buildings. The first dental clinic in the United States planned definitely for rural school children was located in a high school building in St. Augustine, St. Johns County, Florida. Traveling dental clinics for rural school children have been successfully tried in several states. In Alaska, one-room schools are sometimes used for medical and surgical clinics, not only for children but also for adults.

#### CARE OF THE TEETH

The examination, dental treatment and daily care of the teeth are matters of the greatest importance for rural as well as city school children. All decayed teeth, whether temporary or permanent, should be filled or otherwise definitely treated. Malocclusion (ineffective meeting) of the teeth should be remedied and can be corrected in early childhood.

It has been recently demonstrated that (in addition to daily brushing), the (prophylactic) cleaning of the teeth of children every three to six months by the dentist or by a properly trained dental hygienist will prevent most of the decay of teeth which takes place.

It may be predicted with entire confidence that in the near future adequate dental care will be insured to all school children in the country as well as in the cities. No item in all the wonderful measures for the health care of the soldiers in the trenches of Europe was more significant than the treatment of the teeth provided by the automobile dentist offices used in France and other countries. Shall not our children in the country schools — future citizens and, if necessity requires, defenders of our own republic — receive as good dental care as soldiers in war?\*

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\* Excess of sugar in the diet is harmful to the teeth and should be avoided.

The establishment of effective habits of daily brushing and cleansing of the teeth is one of the most essential features in health teaching in the schools. Every child should have his own tooth-brush to be kept in a clean place and used at least once, or better, twice a day.

For cleaning the teeth, a good tooth brush with bristles that do not easily break or pull out, should be used. The teeth should be brushed, not only up and down and across, but also by a rotary or circular motion from the gums of one jaw over the teeth to the gums of the other, and so round and round. In addition to the tooth brush, dental floss (waxed silk thread) should be used every day or two to remove the decaying food from between the teeth, where decay most often takes place. The best mouth wash is lime water,<sup>4</sup> which may be used beneficially once a day to rinse the mouth.

#### THE SCHOOL NURSE

The school nurse has already demonstrated the extraordinary value of her services in the health work of the schools. Statistics prove that in one prominent phase of her work the school nurse bridges the gap between failure and success, or at least between inefficiency and efficiency in a vital part of the health program. Without the service of the nurse, only from 15 to 25 per cent. of the pupils have physical defects corrected, following the notice and recommendation sent by the school doctors to the parents. On the other hand, with the aid of the school nurse, from 75 to 90 per cent. of the pupils reported, receive remedial attention.

In the cities of the United States there are about 750 nurses giving most or all of their time to the work of the schools. On the other hand, there are today a much smaller number of nurses in rural districts employed primarily for health work in the schools. The service of the school nurse is, however, even more needed in rural communities than in cities, because of the lack of physicians, hospitals, clinics, and other

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4. To make lime water, place one half cup full of finely powdered unslaked lime in a quart bottle filled with clean, pure water. Allow to stand twenty-four hours and pour off the clear liquid into bottle to use for mouth wash. This powder may be used for successive solutions until entirely dissolved.

social agencies which are so helpful in advancing health work for the children.

The duties of the rural school nurse include prominently the following:

- (a) Assisting in the health examinations of pupils.
- (b) Explaining to the parents the importance of defects found in children and helping in the arrangements for the medical, surgical or dental treatment required.
- (c) Giving emergency treatment in health disturbances and following up treatment, under medical direction, for various conditions.
- (d) Providing an important part of the health teaching for the pupils and giving in homes visited, suggestions and advice affecting the health interests not only of the children, but of the home.

In many a community, not only in city but in country, the tactful, devoted nurse has made for herself a place of the greatest influence in promoting health and human welfare in general.

Every community should have the service of a nurse whose first, if not sole, duty is to care for the health of the school children.

#### WARM LUNCHES IN SCHOOLS

Every growing child needs a warm, nourishing mid-day lunch. The child with malnutrition should have an additional light lunch in the middle of the forenoon and afternoon.

The practice of providing warm school lunches in city schools is increasing very rapidly and has been so successful that this idea is extending throughout the country, and a great many rural schools in many states are adopting the plan of warm lunches for pupils.

A school lunch service should be a part of every rural school. It should be fostered, at least, if not entirely created, owned and managed by the school authorities. It can be most successfully managed cooperatively by

- (a) The school authority (district or county).
- (b) The teacher.
- (c) Pupils.
- (d) Parents of the children.

Every school building should have a simple kitchen equipment in a small room built for this purpose, or in the school room. A simple equipment, not including the stove, can be purchased for from \$4 to \$10. Parents can club together and furnish either a fixed sum of money or a supply of food materials. The teacher, with the aid of pupils working in groups periodically, can prepare the lunches. This is now done in many of the schools having lunch service. The preparation of the school lunch makes the best possible demonstration for a lesson in domestic science and cookery. The children with the warm lunch are better nourished and do their school work, especially in the afternoon, with better results. The instruction in selection and preparation of foods in many cases extends through the pupils to the homes, and this is, in the country particularly, the most effective way of influencing beneficially the standards and methods of the homes.

#### SANITARY AND ATTRACTIVE RURAL SCHOOLS

The health of children is affected vitally by their surroundings.

The buildings, which house under compulsion three-fifths of the nation's children of school age for eight hundred hours each year, should be beyond all possibility of failure, free from unhealthful and unfavorable features.

The rural school is relatively the worst type of building in the country. It should be, in essential fitness for its purposes, the very best.

#### EFFICIENT TEACHERS FOR HEALTH WORK

The teacher in the rural school has inevitably a larger opportunity and responsibility for all educational functions than does the city teacher. This is especially true in matters relating to the health and welfare of the pupils. She is further away from the help and services of superintendent, physician, nurse and all health and other social agencies. The wisest conduct and adjustment in ordinary or emergency circumstances requires exceptional understanding and sound judgment, and the rural teacher should, therefore, be unusually efficient.



## HEALTH TEACHING

Effective health training in the rural schools should aim decisively at the following results:

- (a) The establishment of health habits and the inculcation of lasting standards of wise and efficient living in pupils.
- (b) The extension of health conduct and care to the school, to the homes, and to the entire community.

For this practical and important school task the teacher must have a clear understanding and confident command of the application of facts and principles in the field of health. If this instruction is to be more than occasionally successful—dependent on the individual teacher, who happens to be particularly interested and fortunately situated—there must be helpful and wise supervision in all of the work by a district or county supervisor well qualified to guide the health teaching with the rest of the health program. This supervisor may be the health officer, the regular school supervisor (if trained for this work) or a wise and efficient school nurse. There should be also a state supervisor whose duties should include the systematic direction of the health teaching in the rural schools.

All health instruction should lead promptly to the practical training of the pupils in personal health habits and in individual and group efforts for the health work of the school, the home, the community, the state, the nation and the world as a whole. The modern idea of pupil organization and government may be used to good advantage, in pupils' boards of health, health militias and other forms of pupils' organizations. The Boy Scout idea,\* which gives such prominence to the health program, may be utilized to as good advantage in rural as in city schools and is being so employed in a number of rural districts.

## PUPILS' HEALTH ORGANIZATIONS

In a number of states where "Clean-Up" and "School Improvement" days have been observed, the pupils in many rural school districts have been

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\* The Girl Scouts and Woodcraft Girls are proving equally beneficial for girls in city and country.

organized into sanitary squads for the purpose of maintaining improved conditions.

The nurses in Kent County, Michigan, and in Grand Forks and La Moure Counties, North Dakota; helping teachers in New Jersey and other states have organized health leagues among the rural school-children for the purpose of maintaining sanitary conditions in the schools and for the cultivation of personal health habits. Similar efforts are reported from most of the other states having county nurses.

#### WHOLESOME PLAY AND RECREATION

Rural children have all outdoors to play in and yet, on the whole, they know very little about how and what to play. Many rural schools have not enough space for an adequate playground, which is not a luxury but a necessity for the welfare of the children. A school without a playground is an educational deformity, and presents a gross injustice to childhood.

Facilities and skilled guidance for play and recreation should be provided at the rural school not only for the pupils in the school, but for the young people in the community. Such provision should include not only athletic games and sports, school and folk dances, but also dramatic training and expression. Noteworthy pioneer effort in this field is being made very successfully by Mr. A. G. Arvold, founder of the Little Country Theater, in Fargo, N. D. Mr. Arvold attempts to solve through organized dramatics the problem of the desertion of the country for the city by young people seeking social diversion.

The Mary Gay Theatre demonstrates the possibilities of presenting health facts in a graphic manner by using an imaginative and artistic medium.\*

The national welfare demands that rural life should be made successfully attractive to the best people. This necessitates generous provision for the social, esthetic, emotional and artistic requirements of young people as well as for their intellectual, economic and health needs.

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\* Mary Gay Theatre is made of fiber and weighs 10½ pounds. The figures are made of cardboard and in a series of stories each containing health facts the child's interest is sustained over a period of time and one lesson is learned before another is given. The Mary Gay suit case theatre may be carried about with ease and will be found useful by field workers. They are manufactured by the Mary Gay Studios, 188 Sullivan St., New York City.

## COOPERATION IN HEALTH WORK OF THE SCHOOLS

If the health program in the rural schools is to be successful, it must enlist the cooperation not only of all individuals logically concerned in this vital aspect of education, but also of all organizations that may be naturally, or by persuasion, interested in the welfare of the children. The granges, medical societies, women's clubs, and church or other organizations may find abundant work to do if the complete program of health is attempted with any thoroughness. Several phases of the health program may require, in any rural community, the support of, or demonstration by, some volunteer organization before school boards or other governmental agencies are convinced of the necessity and practicability of the new measures. Every community in country as well as in city vitally needs the help of some volunteer organization of unselfish people whose dominant interest is the health and welfare of the children.

In many states, joint committees of representatives from State Teachers' Associations and State Medical Societies are being organized to promote the health interests of all the schools.

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## TEN GOLDEN RULES OF HEALTH FOR SCHOOL CHILDREN

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1. Play hard and fair. Try to win. Be loyal to your team mates and generous to your opponents.
2. Keep your weight up to the standard for your height and age. Drink milk every day. Eat some green vegetables or fresh fruit each day. Eat slowly. Do not eat between meals. Chew food thoroughly. Never drink water when there is food in the mouth. Drink water several times during the day.
3. Brush your teeth at least once a day. Rinse your mouth out well with water after each meal.
4. Be sure your bowels move at least once each day.
5. Keep clean—body, clothes and mind. Wash your hands always before eating. Take a warm bath with soap once or twice a week; a cool sponge (or shower) bath each morning before breakfast and rub your body to a glow with a rough towel.
6. Try to keep your companions, especially young children, away from those who have contagious diseases.
7. Use your handkerchief to cover a sneeze or cough and try to avoid coughing, sneezing, or blowing your nose in front of others.
8. Study hard—and in study, work, or play do your best.
9. Sleep: Get as many hours in bed each night as this table indicates for your age. Keep windows in bedroom well open.

### Hours of Sleep and Time in Bed for Different Ages

Age	Hours in Bed
4 to 6 years	13 — 6:00 p. m. to 7 a. m.
6 to 8 years	12 — 7:00 p. m. to 7 a. m.
8 to 10 years	11½ — 7:30 p. m. to 7 a. m.
10 to 12 years	11 — 8:00 p. m. to 7 a. m.
12 to 14 years	10½ — 8:30 p. m. to 7 a. m.
14 to 16 years	10 — 9:00 p. m. to 7 a. m.
16 to 18 years	9 — 10:00 p. m. to 7 a. m.

10. Be cheerful; do your best to keep your school and your home clean and attractive, and to make the world a better place to live in.

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cally defective in which children may  
instruction requisite for their exceptional needs.

- IX. Generous provision for wholesome play and recreation in school and community.
- X. Organization and cooperation of the home and the school and of interested people and societies to insure to all children the essentials of health and general well-being.

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